

**BEFORE THE SUBCOMMITTEE
OF DEPARTMENT OPERATIONS,
OVERSIGHT, NUTRITION, FORESTRY
OF THE HOUSE COMMITTEE ON AGRICULTURE**

**HEARING ON THE AMENDMENT OFFERED BY
SENATOR TORRICELLI TO S.1
THE ELEMENTARY AND SECONDARY EDUCATION ACT
JULY 18, 2001**

**STATEMENT OF GEORGE WICHTERMAN
CHAIRMAN OF THE LEGISLATIVE AND REGULATORY COMMITTEE
AMERICAN MOSQUITO CONTROL ASSOCIATION**

I am George Wichterman, Chairman of the Legislative and Regulatory Committee for the American Mosquito Control Association, and Senior Entomologist with the Lee County Mosquito District in Florida. I am also a member of the Committee to Advise

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emerging adults. Surveillance provides other clues which are necessary to be established prior to any application of a pesticide.

For the purposes of this testimony, I shall provide the members of this subcommittee with what we do in the State of Florida, specifically, the Lee County Mosquito Control District, Fort Myers, Florida. Both medical entomologists and mosquito control professionals alike agree with the following premise: Because one has an effective mosquito control program, involving surveillance, it would follow the number of public health disease vectors will be limited. To that end with the State of Florida having identified 74 different species of mosquitoes and Lee County, Florida, being resident to 47 of the total, surveillance is tantamount to an effective mosquito control program. As you might presuppose, mosquito breeding habitats will be different, as well, e.g. salt marshes, freshwater flooded forested areas, tires, other artificial containers, residential roadside swales, etc. As a result time- tested surveillance mechanisms have been developed by Centers for Disease Control and Prevention (CDC), the United States Department of Agriculture (USDA), universities, and mosquito control districts to locate and determine whether a mosquito infestation may exist. The very surveillance location of choice not only to Lee County, but also the nation as whole include public school grounds and/or properties controlled by a school district. One of the most vulnerable segments of our population include our children.

The Lee County Mosquito Control District utilizes multiple surveillance techniques, combined with entomological inspections in and around public school property, for the collection of mosquitoes. Multiple analytical determinations for the detection of arbovirus compliment this comprehensive program. The aforesaid requires the multiple approaches due to habitat variation among the species of mosquitoes; thereby, necessitating laboratory analyses for the different virus types which are species specific and endemic to Lee County. This involves the use of a tree-mounted trap, complete with a light and fan motor designed to attract and direct mosquitoes to a collection bag/CDC Light Trap. Additionally a bait (CO₂) used as an attractant is suspended next to the trap. Once the collection has been analyzed for female *Culex* mosquitoes and numbers in excess of 500 are identified; adulticiding may be warranted upon further inspection in areas surrounding school property.

Analytical determinations will be performed on adult *Culex* mosquitoes by testing for viral antigens present. Reverse Transcriptase Polymerase Chain Reaction (RT-PCR) with electrophoresis performed by CDC trained district personnel are able to provide officials with current information regarding potential viral activity. Triggers for further entomological inspections will be called for upon the detection of a single viral antigen present. With this type of testing we are capable of detecting Eastern Equine Encephalitis (EEE) St Louis Encephalitis (SLE) and West Nile Virus (WNV). As an added safeguard, aliquots are taken from the district's samples and sent to the Centers for Disease Control and Prevention, Division of Vector Borne Infectious Diseases at Fort Collins, Colorado for confirmation.

Continuing on with the surveillance discussion the Lee County Mosquito Control District (LCMCD) employs the use of the gravid trap. Currently this type of trapping is performed on an annual basis concurrent with the CDC light trap program. Another phase of the mosquitoes complete metamorphosis will be studied by this sampling technique - the mosquito egg. The primary attractant for this trap is a bucket of standing water; whereby, gravid adult *Culex* mosquitoes are drawn into a collection device within the trap and later studied. If eggs have been noted on the water's surface it would follow that these adults will be in search of another blood meal; thus potentially capable of virus transmission. Subsequently adults are studied in the laboratory to determine fecundity. Henceforth, because adult mosquitoes in this genus must

have a blood meal, a requisite for oviposition, the object of the gravid trap is to catch mosquitoes that have already had a blood meal. It is during this life stage that virus activity may be ongoing, and thereby provide a “heads-up” for us to observe through other surveillance techniques arboviral activity.

The remaining portion of this discussion will include the sentinel chicken program and the truck trap adult floodwater mosquito collection device. Serological studies are undertaken on a half-dozen male chickens for the detection of SLE, EEE, WNV, on a biweekly basis. Both hemagglutination and hemagglutination inhibition tests (HA-HI) are performed on the collected blood samples. These HA-HI tests determine the presence of viral antibodies for each of the aforementioned viruses. Again triggers for further entomological inspections may be warranted with only one chicken sero-converting within the flock. Of the seventeen different locations providing this information throughout Lee County, six locations are actually situated on school grounds with the remaining located within a mile of school property.

The truck trap is a non-selective sampling device which consists of a truck-mounted funnel shaped screen enclosure with a collection bag affixed to the trailing end of the opening. Over 50% of the 43 different locations for this type of collection are located within 1 mile of public school property. Each trapping location consists of a three-mile run on the hard surfaced roads throughout Lee County. At the beginning and end of each three-mile run resides a rain gauge station monitoring rainfall on a 24-hour basis, seven days a week between May and October. This information collected daily provides the district with an accurate measurement of adult mosquito activity and potential mosquito breeding throughout Lee County. During the mosquito season rainfall amounts in excess of 0.8 inches per evening require the entomological inspection; whereby, an individual will inspect by ground and/or by air areas of standing water. Water samples containing 2 to 3 mosquito larvae and/or pupae per sample throughout the affected area will trigger a larvicide application. Throughout these inspections our personnel are observing for adult emergence. Critically important to any credible surveillance program involves the human contact with potential mosquito breeding locations. From this point emanates what other types of activity may be required to control juvenile and adult mosquitoes.

The entire point of this aforesaid discussion on a comprehensive surveillance program demonstrates the importance that mosquito control districts place upon the determination of a potential mosquito infestation and the subsequent laboratory analysis for human disease around our nations public schools.

What this means to mosquito control

Specifically, there are several requirements in this amendment that need to be reconsidered. These relate to notification, reentry and authorization of funds. One such requirement involves the “Notification to Persons on Registry.” It stipulates that “Notice of an upcoming pesticide application at a school shall be provided to each person on the registry of the school not later than 24 hours before the end of the last business day during which the school is in session that preceded the day on which the application is to be made and (II) the application of a pesticide for which notice is given under subclause (I) shall not commence before the end of the business day.”

For example, if on Monday morning a mosquito control district located the presence of a mosquito infestation on or around any property that is controlled, managed, or owned by the school or school district, under the notification process, the district would be unable to treat until the following

Tuesday evening or Wednesday morning. Unfortunately, inclement weather often prevails later in the afternoon including the early evening hours, thus precluding treatment of standing water. Further, helicopters applying the pesticide could not safely fly at low altitude levels during the night time hours, as well as there being increased difficulty for the pilot being able to see the area requiring treatment. Under such circumstance, mosquitoes in the aquatic stage could emerge into flying adults and/or localized adult infestations could migrate into other populated areas. This would require more pesticide applications over a wider area and more frequently. Another example on how this notification process would preclude treatment up to 4 days later would be as follows: if a mosquito infestation is located on or around any other property that is controlled, managed or owned by the school or school district, whether it be in standing water and/or flying adults on Saturday morning, then it would follow through the notification process, that we would be unable to treat until the following Tuesday evening or Wednesday morning prior to the school day.

Another requirement mandated by this amendment involves post treatment reentry restrictions. It states that “the period specified on the label of the pesticide during which a treated area or room should remain unoccupied; or if there is no period specified on the label, the 24-hour period beginning at the end of the treatment.”

Post Treatment Reentry Requirements

What this means to mosquito control

The time frame of the proposed notification, treatment and reentry rules are for household and structural pests but are not based on the biology of the mosquito. The governmental mosquito control agencies already have rules for advanced notification, involvement of the public and elected officials and apply materials approved for community wide use.

Because none of our currently EPA labeled public health pesticides requires a post treatment reentry time, then, in keeping with the amendment addressing the first example, - whatever time the pesticide application was made on Wednesday, individuals at the affected school would not be allowed to reenter the treated school until 24 hours after the treatment. In another words, the school personnel and children could not occupy these areas until sometime on Thursday.

With West Nile Virus already being confirmed in the State of Florida, public health officials would be severely hampered in containing outbreaks of the virus and other virus' following the protocol in this amendment. As a matter of record CDC has already confirmed the presence of this virus in the following 12 states (New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania, Maryland, Delaware, Virginia, North Carolina), including the District of Columbia.

The remaining requirement in this amendment addresses the “Authorization of Appropriations” that states “there are authorized to be appropriated such sums as are necessary to carry out this section.” It is clear the notification, registry, posting and enforcement requirements in the amendment will result in significant administrative costs for every school facility covered by the legislation. This amendment also places significant responsibilities on the Florida Department of Agriculture and Consumer Services to develop and implement plans relating to the use of pesticides on school property. Since no resources to administer this new program have, as of yet, been adopted as part of this measure, Florida’s primary agency for pesticide enforcement and certification is concerned that

the amendment, as currently worded, will adversely impact existing program functions and further complicate efforts to enforce other federal pesticide requirements.

According to State of Florida officials' perspective it would also be appropriate to consider potential litigation costs given the likelihood tort claims will be brought against schools failing to fully comply with the "School Environment Protection Act of 2001".

From a pesticide state lead agency perspective, its reasonable to assume Florida will be expected to provide outreach support to the schools relative to implementation of the program and to investigate complaints and impose the regulatory remedies provided by law when violations are found. Back in 1994, a somewhat similar program was adopted by the EPA for the protection of agricultural workers handling pesticides or entering areas treated with pesticides. The regulation requires worker training, posting, and contains other "right to know" provisions similar to the School Environment Protection Act of 2001.

Because of existing funding and workload considerations Florida allocated about 14% of their enforcement program resources to this important, but under-funded effort. This has worked out to an annual cost of about \$260,000 which pays for about 350 inspections/investigations and gets us a lot of criticism from various groups that we're not doing enough. Current federal funding support for the regulation covers only about 16% of \$260,000 (\$41,600) the State spends.

Florida anticipates a similar result. Complaints alleging violations will be submitted with the expectation they be investigated and resolved. The schools will want assistance complying with the law, and the Florida Department of Agriculture and Consumer Services have to decide if scarce resources needed for other programs should be allocated to work on yet another federal program - that is - if Congress doesn't provide the funding to do a credible job managing the program.

Based upon the American Mosquito Control Association's past experience with this type of language regarding the mere authorization of appropriations by Congress as opposed to an actual appropriation being made, there is a significant question regarding whether this is simply another unfunded mandate. In our experience, we have been trying unsuccessfully for five years to obtain appropriated funds as it relates to HHS implementation of the Food Quality Protection Act 1996, and the establishment of the Public Health Pesticide Data Collection Program under the Food Quality Protection Act (see attached letter to Dr. Richard J. Jackson).

Conclusion

As an organization of over 2,000 public health professionals across the nation, the American Mosquito Control Association is dedicated to preserving and protecting the nation's public health. It is important that public health professionals are able to function in an effective manner in order that they may protect our people and nation, especially the most vulnerable segments of our population - our children and our senior citizens.

I again thank the subcommittee for holding this important public hearing and greatly appreciate the opportunity to be included in this process. I pledge our willingness to work with this subcommittee to promote, protect, and preserve the nation's public health.